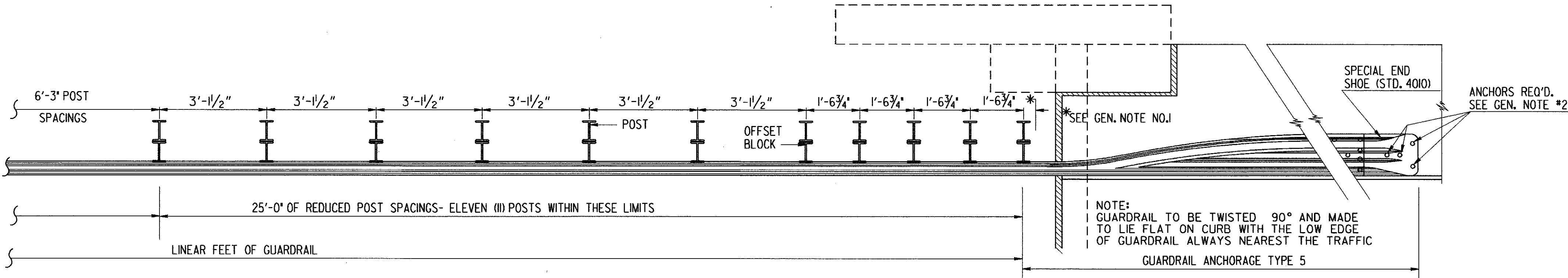


GUARDRAIL ANCHORAGE TYPE 5

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSSTP-M00200(777)	32	37

NOTE:
STEEL POSTS AND STEEL OFFSET BLOCKS
ARE DEPICTED IN THE DETAILS.



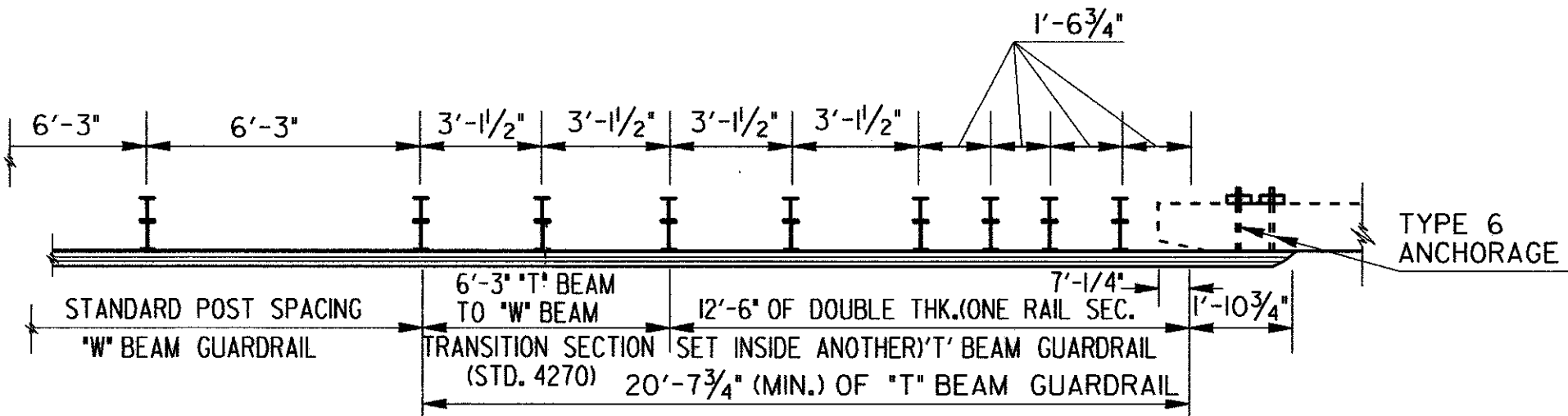
NOTE:
PAYMENT FOR ANCHORAGE TYPE 5 OR TYPE 6, AS SPECIFIED, INCLUDES FIVE (5) BOLT CONNECTIONS (EITHER HOLES DRILLED THROUGH CONCRETE OR ANCHOR BOLT INSTALLATIONS) WHERE "T" BEAM GUARDRAIL ATTACHMENT IS SPECIFIED OR FOUR (4) SUCH BOLT CONNECTIONS WHERE "W" BEAM GUARDRAIL ATTACHMENT IS SPECIFIED.

SPECIAL NOTE:
REDUCED POST SPACING WILL BE REQUIRED AS SHOWN EXCEPT AT THE TRAILING END OF ONE-WAY TRAFFIC FLOW IN WHICH CASE NORMAL POST SPACING (6'-3\"/>

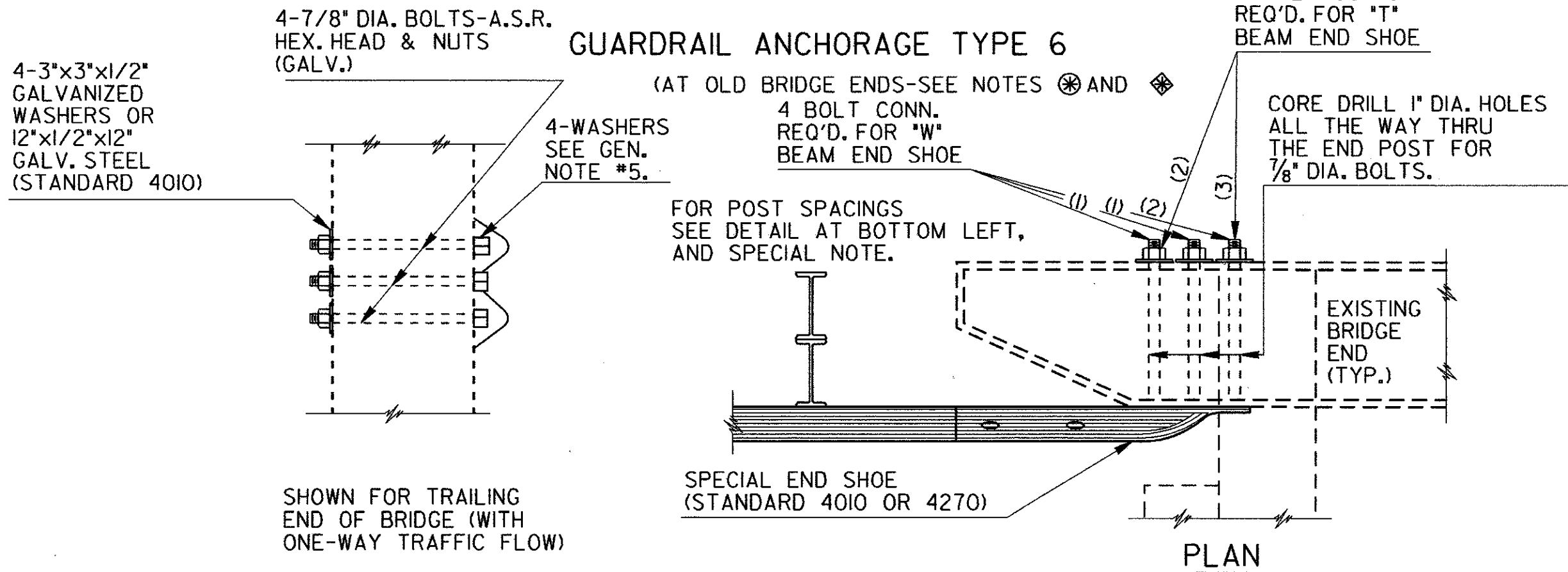
PLAN

DETAIL "A"
ATTACHMENT OF SPECIAL END SHOE ON A BRIDGE CURB

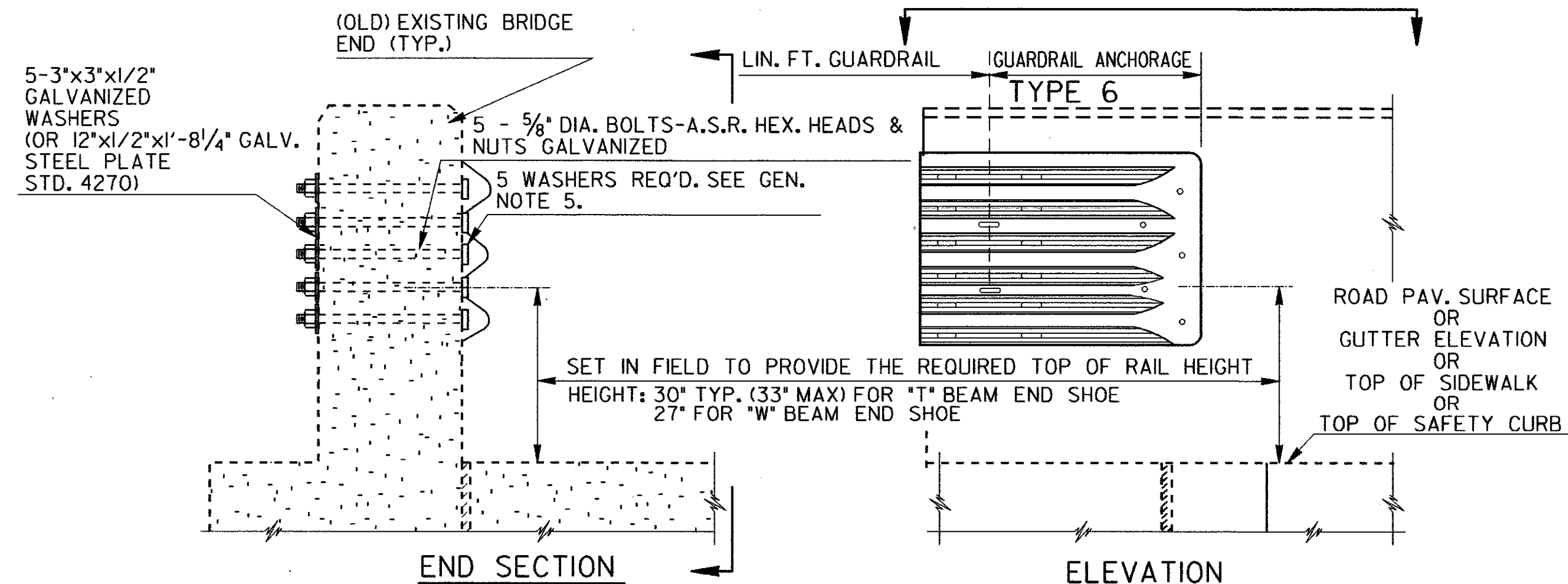
NOTE:
GUARDRAIL ANCHORAGE TYPE 5 IS FOR USE WHERE SPECIAL END SHOE IS ATTACHED ON TOP OF BRIDGE CURB. THIS WILL GENERALLY BE WHERE CURB OR AT EXISTING BRIDGE ENDS ON SAFETY IMPROVEMENT PROJECTS. SEE APPLICABLE STANDARDS OR PLAN DETAILS.



DETAILS OF SPACINGS FOR ADDITIONAL POSTS AT TYPE 6 ANCHORAGE
(SEE ALSO SPECIAL NOTE ABOVE LEFT.)



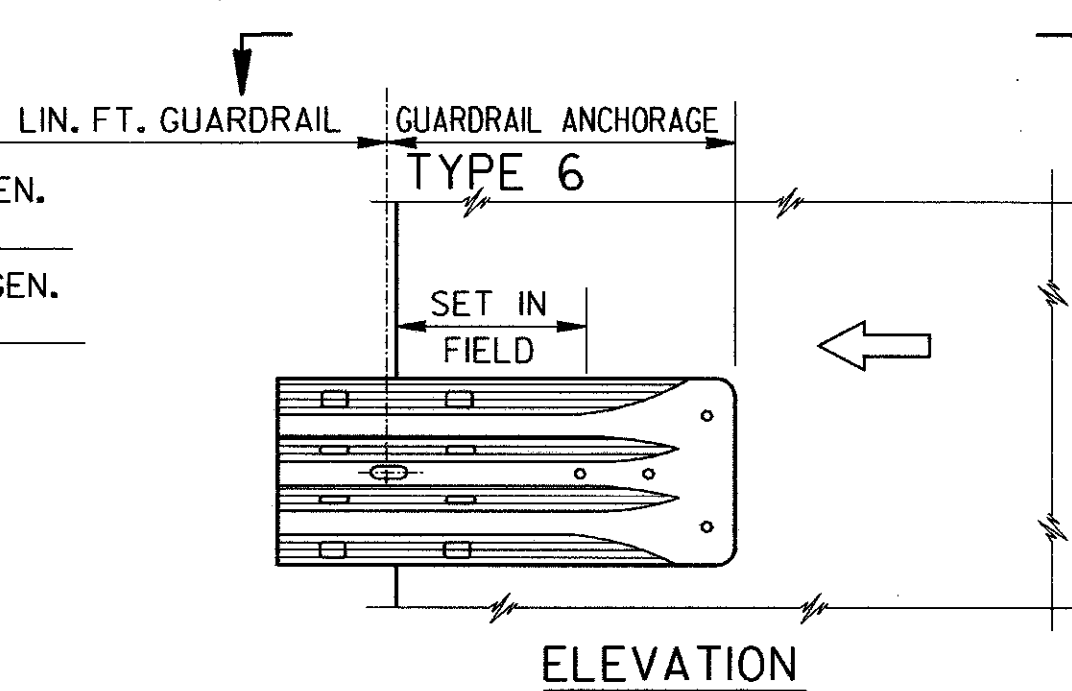
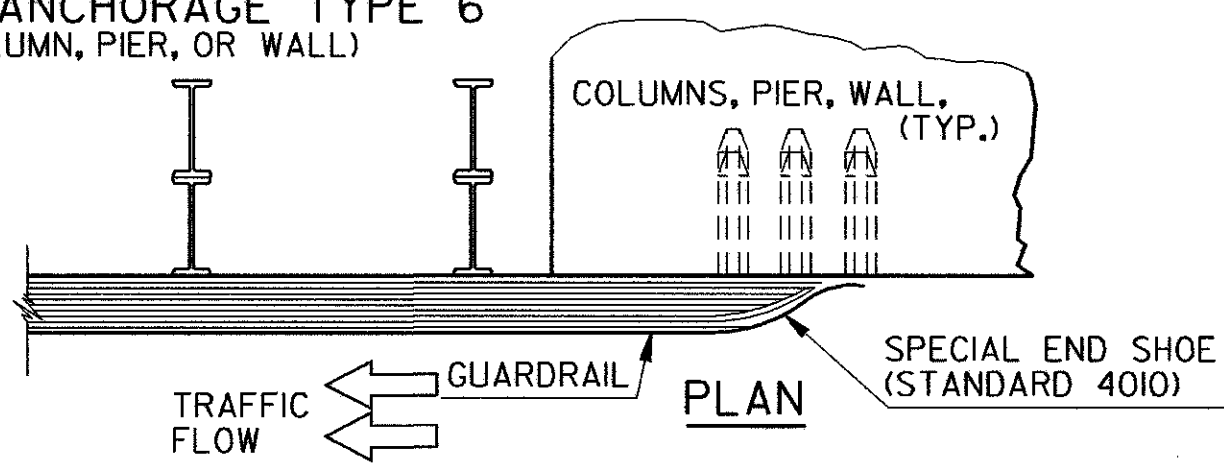
PLAN



GUARDRAIL ANCHORAGE TYPE 6
(AT COLUMN, PIER, OR WALL)

FOR POST SPACINGS
SEE DETAIL AT BOTTOM LEFT
AND SPECIAL NOTE.

NOTE: USE OF "W" BEAM END SHOE INSTALLATIONS FOR TYPE 6 ANCHORAGES ARE LIMITED TO CONNECTIONS AT EXISTING STRUCTURES ON THE TRAILING END OF ONE-WAY TRAFFIC. AS SHOWN. OTHERWISE, TYPE 6 ANCHORAGES REQUIRE "T" BEAM END SHOE INSTALLATION WITH FIVE(5) BOLT CONNECTIONS.



DETAIL "D" (FOR RETAINING WALL OR ABUTMENT)

END ELEVATION

(SHOWN FOR TRAILING END OF ONE-WAY TRAFFIC FLOW)

NOTE: 2

GUARDRAIL ANCHORAGE TYPE 6 IS FOR USE AT EXISTING BRIDGE ENDS, COLUMNS, PIERS, WALLS, ETC., WHERE THE INSTALLATION OF GUARDRAIL INVOLVES EITHER DRILLING HOLES IN THE CONCRETE OR INSTALLING CONCRETE ANCHOR BOLTS FOR THE PURPOSE OF ATTACHING THE SPECIAL END SHOE.

DO NOT SPECIFY GUARDRAIL ANCHORAGE TYPE 6 AT NEW BRIDGE END POST (STD. 3054 TYPICAL), OR WHERE HOLES HAVE BEEN PROVIDED IN CONCRETE FOR THE SPECIAL END SHOE CONNECTION. IN THIS CASE, PAYMENT FOR LIN. FT. OF GUARDRAIL WILL INCLUDE THE END SHOE CONNECTION AND THESE DETAILS WILL NOT APPLY.

GENERAL NOTES:

1. THE FIRST POST IS TO BE PLACED AS CLOSE TO THE BRIDGE AS POSSIBLE BEING CAREFUL TO AVOID DRIVING THE POST ON TOP OF THE PAVING REST.

2(a) THE SPECIAL END SHOE AT DETAILS "A" & "D" WILL BE ANCHORED WITH 5(OR 4) APPROVED TYPE 7/8\"/>

(b) SELF DRILLING ANCHORS WILL NOT BE PERMITTED EXCEPT IN NON-REINFORCED CONCRETE. OVER-SIZED DIAMETER DRILLED HOLES WILL NOT BE ALLOWED FOR ANCHOR INSTALLATIONS. ALL CONCRETE ANCHOR BOLTS WILL BE INSTALLED EXACTLY AS RECOMMENDED BY THE MANUFACTURER. IMPROPER INSTALLATIONS WILL BE CORRECTED AT CONTRACTOR'S EXPENSE. ANCHOR INSTALLATIONS SHALL BE SUBJECT TO RANDOM HYDRAULIC PULL OUT TESTING. *** ALL ANCHOR BOLTS WILL BE HOT-DIPPED GALVANIZED ACCORDING TO AASHTO M-III.

3. HOLES IN SAFETY CURBS ARE TO BE CAULKED TO AVOID WATER STANDING IN THEM.

4. STEEL POSTS AND STEEL OFFSET BLOCKS ARE DEPICTED IN THE DETAILS.

5. WASHERS FOR CONNECTING THE SPECIAL END SHOE TO CONCRETE FACE ARE TO BE 7/8\"/>

6. ALL MATERIAL NOT SPECIFIED SHALL MEET GA. D.O.T. SPECIFICATIONS AND/OR SPECIAL PROVISIONS, AND WHERE POSSIBLE BE THE SAME AS IN THE ADJOINING GUARDRAIL. ALL HARDWARE TO BE GALVANIZED, SAME AS REQUIRED FOR GUARDRAIL. ALL BOLTS AND NUTS SHALL CONFORM TO A.S.T.M. A-307.

7. THE PLACEMENT OF THE SPECIAL END SHOE ON TOP OF THE CURB IS LEFT TO THE DISCRETION OF THE CONTRACTOR WITH THE RESTRICTION THAT IT BE FLUSH WITH THE EDGE OF THE CURB AND NO MORE THAN 25\"/>

8. PAYMENT FOR GUARDRAIL ANCHORAGE TYPE 5 OR TYPE 6 INCLUDES THE INSTALLATION OF ANCHOR BOLTS OR DRILLING HOLES IN CONCRETE AS REQUIRED.

9. ANY CUTTING OR DRILLING IN GUARDRAIL SECTIONS SHALL BE REPAIRED WITH GALVANIZING IN ACCORDANCE WITH GEORGIA STANDARD SPECIFICATIONS.

10. SEE STDS. 4010 & 401A FOR DETAILS OF GUARDRAIL ELEMENTS, POSTS, BLOCKS, ETC.

*** 5/8\"/>

EACH ANCHOR INSTALLATION WILL BE CHECKED INDIVIDUALLY FOR BROKEN OR IMPROPERLY INSTALLED BOLTS. ANY SUCH INSTALLATION WILL BE CORRECTED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE DEPARTMENT.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
GUARDRAIL ANCHORAGE TYPE 5 & 6
AND
GUARDRAIL ATTACHMENT TO COLUMNS, PIERS OR WALLS

NO SCALE NOVEMBER 1980

DES. L.T.O. (SUBMITTED) REV. R.M.J. (APPROVED) TRA. C.M.E. (APPROVED) CHK. R.K.C. (APPROVED)

NUMBER
4013